

CLAIMS

We Claim:

- 5 1. A SLIM nucleic acid encoding a SLIM protein, comprising a nucleic acid sequence having at least about 90% identity to the nucleic acid sequence set forth in Figure 2, wherein said SLIM protein comprises an N-terminal myristylation sequence, an N-terminal SH2 domain, and an N-terminal SH3 domain and will bind to Cbl.
- 10 2. The SLIM nucleic acid according to Claim 1, wherein said SLIM protein lacks a tyrosine kinase domain.
- 15 3. The SLIM nucleic acid according to Claim 2, further comprising the nucleic acid sequence set forth in Figure 2.
- 20 4. A SLIM nucleic acid encoding a SLIM protein, comprising a nucleic acid sequence having at least about 90% identity to the nucleic acid sequence set forth in Figure 2, wherein said SLIM protein comprises an N-terminal myristylation sequence and an N-terminal SH2 domain and is unable to bind to Cbl.
- 25 5. A SLIM nucleic acid encoding a SLIM protein, comprising a nucleic acid sequence encoding an amino acid sequence having at least about 90% identity to the amino acid sequence set forth in Figure 2.
- 30 6. A SLIM protein, comprising an amino acid sequence having at least about 90% identity to the amino acid sequence set forth in Figure 2, wherein said SLIM protein comprises an N-terminal myristylation sequence, an N-terminal SH2 domain, and an N-terminal SH3 domain and will bind to Cbl.
7. The SLIM protein according to Claim 6, further comprising the amino acid sequence set forth in

Figure 2.

8. A SLIM protein, comprising an amino acid sequence having at least about 90% identity to the amino acid sequence set forth in Figure 2, wherein said SLIM protein comprises an N-terminal myristylation sequence and an N-terminal SH2 domain and is unable to bind to Cbl.

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9. A method for screening for a bioactive agent capable of binding to SLIM, comprising:

- a) contacting a SLIM protein and a candidate agent; and
- b) determining the binding of candidate bioactive agent to SLIM protein;

10. wherein said SLIM protein comprises an amino acid sequence having at least about 95% identity to the amino acid sequence set forth in Figure 2.

10. A method for screening for a bioactive agent capable of modulating SLIM binding, comprising:

- a) combining a SLIM protein, a candidate bioactive agent and Cbl; and
- b) determining the binding of Cbl to SLIM in the presence of candidate bioactive agent;

15. wherein said SLIM protein comprises an amino acid sequence having at least about 95% identity to the amino acid sequence set forth in Figure 2 and wherein said SLIM protein will bind to Cbl in the absence of candidate bioactive agent.

20. 11. A method for screening for a bioactive agent capable of modulating lymphocyte activation, comprising:

- a) contacting a candidate bioactive agent to a lymphocyte comprising a recombinant nucleic acid encoding a SLIM protein;
- b) inducing activation of said lymphocyte; and
- c) determining the activation of said lymphocyte in the presence and absence of said candidate bioactive agent;

25. wherein said SLIM protein comprises an amino acid sequence having at least about 95% identity to the amino acid sequence set forth in Figure 2, and wherein a difference in the activation of said lymphocyte in the presence and absence of said candidate bioactive agent indicates that said candidate bioactive agent is capable of modulating lymphocyte activation.

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12. The method according to Claim 11, wherein said SLIM protein comprises the amino acid sequence set forth in Figure 2.
- 5 13. The method according to Claim 11, wherein lymphocyte activation is done by activating antigen receptor in said lymphocyte.
- 10 14. The method according to Claim 11, wherein determining the activation of said lymphocyte comprises determining the activity of a nuclear factor in activated T cells (NFAT) responsive promoter.
- 15 15. The method according to Claim 11, wherein determining the activation of said lymphocyte comprises determining the expression of CD69.
16. A method for screening for a bioactive agent capable of modulating the ubiquitination of a Cbl target protein, comprising:
15 a) combining SLIM, Cbl, ubiquitin or polyubiquitin, and a Cbl target protein; and
 b) determining the level of ubiquitination of Cbl target protein in the presence and absence of candidate bioactive agent;
wherein said SLIM protein comprises an amino acid sequence having at least about 95% identity to the amino acid sequence set forth in Figure 2 and will bind to Cbl and Cbl target protein in the absence 20 of candidate agent, wherein a change in the level of ubiquitination of Cbl target protein in the presence of candidate agent indicates that said candidate bioactive agent is capable of modulating the ubiquitination of a Cbl target protein.